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| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/697,090 | KAWAGUCHI ET AL. | |
| | Examiner | Art Unit | |
| | Sikha Roy | 2879 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/31/03.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>10/31/03</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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DETAILED ACTION
EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. David Safran on August 26, 2005.

The application has been amended as follows:

In the Claims

Claim 1 line 7, 'wherein the amounts' has been replaced with -- wherein amounts--.

Claim 4 line 7, 'setting the amounts' has been replaced with --setting amounts--.

In the Specification

Page 1 section [0004] line 4, 'JP-A 2000-75269' has been replaced with -- JP-A 2002-75269--.

Page 3 section [0010] line 2 'wavelength of 660' has been replaced with -- wavelength of 668--.

A period has been added at the end of the last sentence in abstract.

The title of the invention is not descriptive. In pursuant to MPEP § 606.01 the title has been changed as follows.

--DISCHARGE LAMP WITH SPECIFIC AMOUNTS OF HALOGEN, OXYGEN,
HYDROGEN AND CARBON--.

Allowable Subject Matter

Claims 1-8 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 4, the references of the Prior Art of record fails to teach or suggest a discharge lamp having the combination of the limitations as set forth in claims 1 and 4, and specifically comprising the limitation of the amounts of oxygen, hydrogen and carbon which are present in the discharge space of the discharge vessel meet the following conditions (1) to (4) when a direct current of 5 mA is fed between the electrodes producing a glow discharge,

Condition (1): $1.0 \times 10^{-4} \leq b/a \leq 1.2 \times 10^{-1}$

Condition (2): $c/a \leq 1.4 \times 10^{-1}$

Condition (3): $d/a \leq 1.2 \times 10^{-2}$

Condition (4): $e/a \leq 1.4 \times 10^{-2}$

where a is the emission intensity of the argon with a wavelength of 668 nm, b is the emission intensity of OH with a wavelength of 309 nm, c is the emission intensity of hydrogen (H) with a wavelength of 656 nm, d is the emission intensity of C₂ with a

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wavelength of 517 nm, and e is the emission intensity of the CH with a wavelength of 431 nm.

Claims 2,3 and 5-8 are allowable for the reasons given in claims 1 and 4 because of their dependency status from claims 1 and 4 respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,271,628 to Sugitani et al. and U.S. Patent 6,669,522 to Nishida disclose a high pressure lamp with specific amount of mercury, halogen and wall loading.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.R.

Sikha Roy
Patent Examiner
Art Unit 2879

Karabi Guharay
KARABI GUHARAY
PRIMARY EXAMINER